IN THE SPECIFICATION:

Page 1, before line 1, please insert the following new paragraph:

-- **RELATED APPLICATIONS**

This application is a divisional of application U.S. Patent Serial No. 09/232,469, filed July 15, 1999, now allowed, which in turn is a continuation-in-part of copending International Application PCT/FR97/01322 having an international filing date of 16 July 1997, and designating the U.S. and claiming priority from French application Serial No. 96/09402, filed 16 July 1996. All of the above-mentioned applications, as well as documents cited herein and documents referenced or cited in documents cited herein, are hereby incorporated herein by reference. Vectors of vaccines or immunological compositions of documents cited herein or documents referenced in documents cited herein or portions of such vectors (e.g., one or more or all of regulatory sequences such as DNA for promoter, leader for secretion, terminator), may to the extent practicable with respect to the preferred host and administration route of this application, also be employed in the practice of this invention; and, DNA for vectors of vaccines or immunological compositions herein can be obtained from available sources and knowledge in the art, e.g., GeneBank, such that from this disclosure, no undue experimentation is required to make or use such vectors; see also PCT/IB97/01040, filed July 28, 1997 and designating the U.S., incorporated herein by reference. --

Amend the second paragraph so that it reads as follows:

-- Immunization and vaccination by direct administration of nucleotide sequences encoding an immunogenic protein (called DNA or polynucleotide vaccination) has been described in Patent Application WO-A-90 11092. The protein encoded by the inserted nucleotide sequence is capable of being expressed in the cells and of bringing about the

development of an immune response. (See also U.S. Patent Nos. 5,846,946, 5,620,896, 5,643,578, 5,580,589, 5,589,466, 5,693,622, and 5,703,055; Science, 259:1745-49, 1993; Robinson et al., seminars in IMMUNOLOGY, 9:271-83, 1997; Luke et al., J. Infect. Dis. 175(1):91-97, 1997; Norman et al., Vaccine, 15(8):801-803, 1997; Bourne et al., The Journal of Infectious Disease, 173:800-7, 1996; and, note that generally a plasmid for a vaccine or immunological composition can comprise DNA encoding an antigen operatively linked to regulatory sequences which control expression or expression and secretion of the antigen from a host cell, e.g., a mammalian cell; for instance, from upstream to downstream, DNA for a promoter, DNA for a eukaryotic leader peptide for secretion, DNA for the antigen, and DNA encoding a terminator.) This application envisages the use of naked DNA as well as of DNA contained in liposomes. Preferably, the DNA is introduced into the muscle. The DNA could also be introduced into the skin, into certain organs or into the blood, making it possible for the injection to be carried out in different ways such as the intradermal route, the transcutaneous route, the intravenous route and the like.

IN THE CLAIMS:

Cancel all the claims with prejudice or the intention of creating estoppel and substitute:

--16. A method for inducing an immunological response in a bovine against a bovine pathogen, comprising administering into the epidermis, dermis and/or hypodermis of the bovine an immunogenic composition that comprises a plasmid that contains and expresses *in vivo* in a bovine host skin cell a nucleic acid molecule having a sequence encoding an immunogen of the said bovine pathogen, by a liquid jet intradermal administration apparatus that administers the composition to the bovine: without a needle ; and into the epidermis, dermis